REVISIONAL NOTES ON THE GENERA ABISARA AND SARIBIA (LEP. RIODINIDAE), WITH DESCRIPTIONS OF NEW SPECIES AND SUBSPECIES.

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(Plate II.)

THE following notes are the outcome of a revision and rearrangement of the African Riodinidae in the British Museum and in the Tring Museum, Lord Rothschild having kindly placed at my disposal the whole of his material. All the species and varieties hitherto known are dealt with by Aurivillius in Vol. XIII of the Macrolepidoptera of the World, to which reference should be made.

I. ABISARA.

1. Abisara gerontes Fab. (1781).

The Fabrician type specimen, a male, is preserved in the Banksian Cabinet in the British Museum. It belongs to the ordinary West Coast form and has been correctly identified by most authors, e.g. by Aurivillius in Seitz, xiii, p. 295. Its occurrence in Sierra Leone appears doubtful; it is found, with certainty, however, in the coastal districts of S. Nigeria and the Cameroons. Farther south the typical subspecies gives way to another, but the species appears to be confined entirely to the tropical rain forest areas:—

A. gerontes gabunica subsp. nov. (Plate II, fig. 1).

δ♀. In the development of the apical ocellus this subspecies is intermediate between typical gerontes and the Ugandan A. simulacris (see below). It is, however, a much larger insect (expanse 38–40 mm. as compared with 35–38 mm.) and has the dark ground colour of the typical West Coast form. The principal difference is in the white band. On the forewing this shows little or no contraction towards the inner margin, not infrequently attaining there a width of 6–8 mm. On the hindwing it is similarly expanded, not sharply triangular as in typical gerontes; it practically reaches the margin in area 3 and extends well around the ocellate spot on either side, and its inner edge is more or less evenly curved in such a manner as to leave the base of area 6 largely black. The underside differences are the same as those of the upperside.

As in typical gerontes, there is in the 3 a conspicuous subtriangular basal patch of modified scales on the hindwing upperside, extending from the base as far as the white band, and from the costa to the anterior edge of the cell; and the corresponding black patch on the underside of the forewing is also present.

Holotype \Im and allotype \Im "Gabun," ex Crowley Coll. Further material consists of 1 \Im , 2 \Im from Ogowé River, 1890 (L. Gazengel); 2 \Im Niari-Quouillou, Station de Loudéma, Route de Loango à Brazzaville (Jacquot).

2. Abisara simulacris sp. nov. (Plate II, fig. 2).

3. Very similar to A. gerontes, but with the following differences. Upperside ground colour lighter brown; the white band creamy, tapering more abruptly towards the costa, its outer edge strongly recurved in area 1b where often the ground colour forms a small projection into it; apical occllus very small, punctiform; the white band of the hindwing moderately large, disposed almost exactly as in gerontes gabunica though a little narrower anteriorly; the faintly paler subapical fascia farther removed from the ocellar spot, narrower but longer. On the underside there are corresponding differences; the dark areas are much paler than in gerontes, and the dark band forming the inner boundary of the white bands of both wings is much narrower and shades imperceptibly into the grey basal area, especially on the hindwing. The most characteristic feature is afforded by the position and shape of the pale postdiseal fascia of the forewing, which commences on the costa at a point midway between the white band and the apex of the wing and runs in a sigmoid curve to the tornus. On hindwing the white band extends farther towards the apex than in gerontes, thus restricting the extent of the fuseous patch which encloses the oeelli.

Holotype \circlearrowleft : Uganda, west shores of Victoria Nyanza, Buddu, 3,700 ft., 19–25.ix.1911 (S. A. Neave). Paratypes: 1 \circlearrowleft , north-west shores Victoria Nyanza, 3,800–3,900 ft., 12–15.ix.1911 (S. A. Neave); 1 \circlearrowleft , shores of L. Isolt, or Wamala, 3,800 ft., 7–8.i.1912 (S. A. Neave); 1 \circlearrowleft , Entebbe (forest), 5,800 ft., 5–11.vii.1911 (S. A. Neave). All in the British Museum. In the Tring Museum there is a series of 16 \circlearrowleft and 4 \circlearrowleft from Mondo, Monyonyo, Kampala, Kiwalogoma, and Kakindu in Uganda, from all of which localities, except Kakindu, there are also in the same museum examples of $Abisara\ neavei$.

The much-reduced apical ocellus, and the sigmoid curve of the postdiscal fascia on the *underside* of the forewing, serve to distinguish this species, and to distinguish it also from the much commoner *Abisara* of Uganda and British East Africa described below (No. 5). There is no trace of the patches of modified scales so well developed in *A. gerontes*.

3. Abisara dewitzi Auriv. (1898) (Plate II, fig. 3).

This appears to be a very constant form, but of restricted distribution, occurring only in the Kassai district of the Belgian Congo. It forms a connecting link between A, gerontes and A, rogersi. There is a series of 8 \circlearrowleft and 1 \circlearrowleft in the British Museum from Lulua-Sankuru, Haut-Kassai, where it was taken in 1902–4 by Landbeck, who also obtained at Luebo, Kassai, October 1903, a male now in the Tring Museum.

4. Abisara rogersi Druce (1878).

The type of rogersi Druce being now in the British Museum, it is interesting to discover that, in spite of Druce's categorical statement to the contrary, there is present a minute apical occllus on the forewing on both upper and lower surfaces. A male and a female from the same source (Angola, Rogers), also in the British Museum, show this occllus even more prominently. A. geryon Stgr. (1887–8) is therefore a synonym of rogersi; Staudinger's figure depicts very accurately a typical rogersi.

A. rogersi dollmani subsp. nov. (Plate II, fig. 4).

The species also occurs in N.-W. Rhodesia, where it was taken by H. C. Dollman, but the Rhodesian examples exhibit an occllus so reduced as to be visible only, except in the female, with the aid of a fairly strong lens. They exhibit a further difference in that the white band of the upperside is very much wider (6–7 mm. at the widest point). These two features, which are very constant in a series of eight males and five females, serve to characterize this subspecies, which occurs in N.-W. Rhodesia and the Katanga district of the Belgian Congo.

Holotype \circlearrowleft , and allotype \circlearrowleft , both from Solwezi, N.-W. Rhodesia, May 1917 (H. C. Dollman).

The species commonly met with in Uganda and British East Africa is without a name. It may be known as Abisara neavei:—

5. Abisara neavei sp. nov. (Plate II, fig. 6).

3. Upperside ground colour nearly as dark as in the corresponding sex of A. gerontes gerontes, the white band of forewing averaging about 4 mm. in width at the widest part and fully reaching costa (with very rare exceptions), its inner edge straight, its outer edge evenly curved and sharply recurrent at inner margin. A distinct, straight or slightly curved, sometimes partially pure white, pale subapical fascia extends from costa to vein 3 or thereabouts; no trace of apical occllus. On the hindwing the white band, where it runs through area 3, instead of tapering to an ill-defined point, finishes bluntly and roundly near the margin; from its angle on or about vein 2, further, it runs direct to the costa, passing wide of the cell and the base of area 6 (in gerontes it follows the outer edge of the cell and runs behind the origin of vein 6).

Underside. The dark areas are more ochreous brown than in typical gerontes. Forewing is entirely devoid of apical ocellus; white band as on upperside; subapical band about 1.5 mm. wide, commencing on vein 9, running straight to vein 3, thence narrowing and curving back strongly to end on inner margin at end of vein 1. Ocelli of hindwing completely isolated from costa and apex by extension of white ground colour; central dark bar 2–3 mm. wide, proximally very ochreous, the area between it and base of wing only very faintly greyish, almost pure white.

 \mathfrak{S} . Like the \mathfrak{S} except that the ground colour of the *upperside* is decidedly paler.

Holotype \Im , Entebbe, 12–20.i.1912 (S. A. Neave); allotype \Im , Ntebi (Entebbe), 3.v.1895 (Jaekson); 29 \Im , 28 \Im from various localities in Uganda and Kenya Colony.

A. neavei and A. simulacris appear to fly together in a number of localities in Uganda. Both species were taken by Dr. S. A. Neave at Entebbe, in the neighbourhood of Lake Isolt, and on the west shores of Lake Vietoria Nyanza, in Buddu. In the Tring Museum also both species have been received from several places (see under A. simulacris); and in the same museum there are two males from the Gallery Forest, Rutshuru River, 1,000 m., Feb. 1908, and two males from the Kongour Forest, Manyema, both in the Congo Free State (R. Grauer), and a single male from Tambura, Southern Bahr-el-Ghazal.

Besides the typical subspecies of A. neavei described above, two others are recognizable.

(a) A. neavei latifasciata subsp. nov. (Plate II, fig. 5).

In the high lands of the western Cameroons, bordering Nigeria, a form of A. neavei occurs which is recognizable at once by the width of the white band on the upperside. At its widest part on the forewing this band measures $5 \cdot 5 - 6$ mm. across. No trace of apical occllus.

Holotype ♂ and allotype ♀ from Banyo, Cameroons, 3,000 ft., August 1921; one paratype ♂ with same data.

(b) A. neavei kivuensis subsp. nov.

A short series of specimens received by Lord Rothschild from Kwidgwi Island, Lake Kivu, where they were taken at an altitude of 1,500–2,000 m. in November by Grauer, differ rather markedly from the other two subspecies. On the *upperside* the narrow subapical white band is greatly obscured, and nowhere pure white; there is a minute black speck, not repeated on the underside, where the apical occllus should be. On the *underside* of the hindwing the dark band dividing the inner and outer pale areas is so reduced as to be almost linear, and as it is paler in coloration, like the other dark markings of this surface, than in typical *neavei*, it is by no means conspicuous; the yellow area surrounding the apical occlli is also little more than linear, and there is a marked tendency for the fuscous area which in turn surrounds this to be connected across area 3 with the submarginal line that extends to the inner margin.

Holotype \Im , allotype \Im , and five \Im paratypes all with data as given above,

in the Tring Museum.

The two males from the Gallery Forest, Rutshuru River, referred to above under A. neavei neavei, exhibit decided tendencies in the direction of A. neavei kivuensis.

6. Abisara delicata Lathy (1901).

Aurivillius states (Seitz, Maerolep., xiii, p. 296) that A. delicata occurs from "Nyasaland to British East Africa." It is not represented in the British Museum from any locality other than the Mlanje district of Nyasaland, where it occurs throughout the year in a constant form exhibiting no sign of seasonal variation.

7. Abisara talantus Auriv. (1891).

This species is represented by three distinct subspecies.

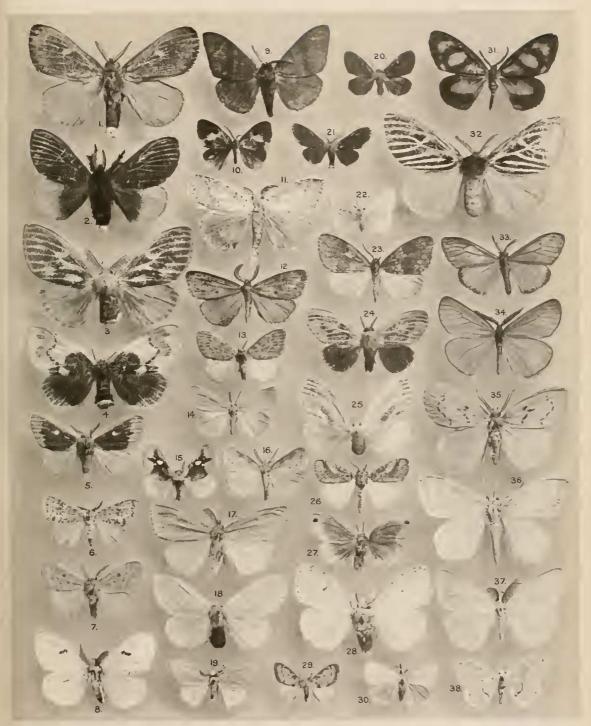
(a) A. talantus talantus Auriv. (1891).

S. Nigeria; coastal district of Cameroous.

(b) A. talantus caeca Rebel (1914).

= A. barnsi Joicey and Talbot (1921).

N.E. Congo (Ituri, etc.) and Uganda.





(c) A. talantus semicaeca subsp. nov. (Plate II, fig. 7).

- 3. Upperside: the purple-blue areas are reduced to a narrow subapical band, and a stripe along the inner margin on the forewing, and on the hindwing to a rather restricted costal patch and the usual marginal and submarginal lines; the apical occllus is present, but reduced in size. The underside is scarcely different from that of typical talantus except for a very slight general darkening, the smaller apical occllus on the forewing, and the absence of the large oval dull ochreous patch at the base of the hindwing.
- \bigcirc . Upperside: darker than in typical talantus, the pale area below the apical occllus absent, and the other two transverse stripes narrower and darker. Underside as in the \circlearrowleft .

Holotype \Im and allotype \Im , Niari-Quouillou, Station de Loudéma, Route de Loango à Brazzaville (Jacquot); $2\Im$, $1\Im$ paratypes with same data. Also $2\Im$ from Ogowe and $1\Im$, $1\Im$ from Gabun in British Museum.

The characters of this subspecies from Gabun present an interesting parallelism to those of A. gerontes gabunica described above.

8. Abisara tantalus Hew. (\mathfrak{P}) (1861).

= Abisara intermedia Auriv. (3) (1893).

There can be no doubt that, as suggested by Aurivillius (Seitz, xiii, p. 296), A. intermedia is the male of A. tantalus.

A curious 3-form in which the hindwing bears a moderately large rounded shining light blue apical patch, adjoining the apical occllate spots, may be known as 3-f. caerulea nov. (Plate II, fig. 8). The only specimen known to the author is in the British Museum and was obtained in the Lower Congo Valley by J. S. Jameson during the expedition for the relief of Emin Pasha.

The female exhibits a good deal of variation in the extent of the white suffusion in the apical third of the forewing. Two females in the Tring Museum from the Kassai district depart so much from the typical form of that sex as to be entirely devoid of all trace of white in this position. On the upperside there are two excessively faint transverse bands only, both of which are represented on the underside, however, by moderately wide grey bands, broad on the costa and tapering towards the tornus. This variety of the female may be known as φ -f. uniformis nov. The type is labelled: Luebo, Kassai R. (P. Landbeck). Another specimen bears the data: Kassai R., Congo F. St. A male from the same source is not separable from males from the Cameroons and S. Nigeria.

9. Abisara rutherfordi Hew. (1874).

In addition to the two races of this species at present known (rutherfordi Hew., and herwigi Dewitz), a third exists which may be described as:

A. rutherfordi cyclops subsp. nov.

 $\Im \mathbb{C}$. Smaller than typical rutherfordi, less brilliant above, more uniformly grey beneath, quite devoid of the reddish tone of rutherfordi, and with narrower and fainter pale markings. The apical occllus of the forewing absent above, very small (typically) or absent beneath. \Im sex-mark on forewing shorter by 1–1·5 mm.; cell of hindwing uniformly dark brown, the sex-mark above it only

about one-quarter the size of that in typical rutherfordi; the blue patch on hind-wing paler, elongate, extending barely half-way across area 3.

Holotype ♂: 9 days 13.v.99; allotype ♀: 17 days 21.v.99 from Fort

Beni, C. F. St. (Congo Free State) (Ansorge), in Tring Museum.

As the form of the female which is totally devoid of ocellus on the forewing appears to be commoner than typical cyclops, it may be called A. rutherfordi cyclops \bigcirc -f. caecata nov. (Plate 11, fig. 9).

Type and paratype, Stanley Falls, 1900 (Landbeck), in B. M.; 1 ♀, 9 days from Fort Beni, C. F. St., 13. v. 99. 1 ♀, Olinga, 8 days from Fort Beni, C. F. St.,

12.v.99 (Ansorge), in Tring Museum.

This subspecies is an interesting parallel to A. talantus caeca, and the eyeless forms of the gerontes group. Together they form an association in the Upper Congo and Uganda region characterised by the great reduction or complete absence of the apical eye-spot which is so prominent a feature of their West Coast allies.

11. SARIBIA.

1. Saribia tepahi Boisd. (1832) (Plate II, fig. 10).

Boisduval's figure is not a very good one, but it shows quite clearly the largest of the three Malagasy species of Saribia here recognized. In an average male the length of the forewing is about 25 mm.; Boisduval's type (now in the British Museum) is a female, and has a forewing length of 26 mm. Apart from size, this species is distinguishable by a number of other small features. In the male the forewing has a distinctly falcate appearance, owing to the slight concavity of the termen between veins 2 and 6, and agrees with the female in being of such a dense, even dull brown colour that the transverse stripes of the underside do not show through at all, or only very slightly, more particularly in the female. On the hindwing the pale fuscous crescents surmounting the marginal spots in areas 4 and 5 are much darker than the larger crescent in area 3. The tip of the tail at vein 3 is white. On the underside of the forewing the light-coloured transverse stripes vary considerably in intensity, but the largest of them, which lies immediately beyond the end of the cell, invariably tapers conspicuously as it runs from the costa towards the tornus. The next stripe, which is a good deal narrower, lies rather more than half-way from this broad stripe to the apical ocellus, and is decidedly sinuous in its anterior half. The third, or submarginal, stripe is only conspicuous in areas 2 and 3, fading away towards the apical ocellus, and never giving rise to subsidiary occlli. On the hindwing the most characteristic feature is provided by the angular white discal line, in that, starting from the costa as a very well-defined line, at vein 5 it becomes entirely obscured by a large diffuse shade of the ground colour, of a darker tint than elsewhere, and remains so obscured at least as far as vein 3; in area 5 there is a silver-edged black submarginal line which, however, never takes the form of a definite ocellus.

This species is represented in the British Museum by a series of 33 males, 15 females, from Tamatave (type locality), Fito, Fenerive, Antsianaka, Lake Alaotra, and Antakares; and it is in the Tring Museum from Antanosy, Morondaya, and Ambinanindrano near Mahanoro.